```
=> s histologic?
        12965 HISTOLOGIC?
        96399 HISTOL
            6 HISTOLS
        96405 HISTOL
                (HISTOL OR HISTOLS)
L1     104569 HISTOLOGIC?
                (HISTOLOGIC? OR HISTOL)

=> s supercritical
        30572 SUPERCRITICAL
            3 SUPERCRITICALS
        30573 SUPERCRITICAL
                (SUPERCRITICAL OR SUPERCRITICALS)
        51132 SUPERCRIT
            1 SUPERCRITS
        51133 SUPERCRIT
                (SUPERCRIT OR SUPERCRITS)
L2      52894 SUPERCRITICAL
                (SUPERCRITICAL OR SUPERCRIT)

=> s carbon dioxide or co2
      1459584 CARBON
        30470 CARBONS
      1470267 CARBON
                (CARBON OR CARBONS)
        559098 DIOXIDE
          7073 DIOXIDES
        560921 DIOXIDE
                (DIOXIDE OR DIOXIDES)
        268362 CARBON DIOXIDE
                (CARBON(W)DIOXIDE)
        464811 CO2
L3      554675 CARBON DIOXIDE OR CO2

=> s ethanol or alcohol
        328188 ETHANOL
          1186 ETHANOLS
        328768 ETHANOL
                (ETHANOL OR ETHANOLS)
        317917 ALCOHOL
        194155 ALCOHOLS
        473847 ALCOHOL
                (ALCOHOL OR ALCOHOLS)
        635344 ALC
        203368 ALCS
        736867 ALC
                (ALC OR ALCS)
        941630 ALCOHOL
                (ALCOHOL OR ALC)
L4     1153097 ETHANOL OR ALCOHOL

=> s l1 and l2 and l3 and l4 and py<=2004
      25140142 PY<=2004
L5           0 L1 AND L2 AND L3 AND L4 AND PY<=2004
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=> s l1 and l2 and l3 and l4
L6 1 L1 AND L2 AND L3 AND L4

=> d l1 ibib abs

L1 ANSWER 1 OF 104569 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:554677 CAPLUS <<LOGINID::20090508>>
TITLE: Dietary Acrylamide Intake and Brain Cancer Risk
AUTHOR(S): Hogervorst, Janneke G. F.; Schouten, Leo J.; Konings, Erik J. M.; Goldbohm, R. Alexandra; van den Brandt, Piet A.
CORPORATE SOURCE: Department of Epidemiology, GROW-School for Oncology and Developmental Biology, Maastricht University, Maastricht, Neth.
SOURCE: Cancer Epidemiology, Biomarkers & Prevention (2009), 18(5), 1663-1666
CODEN: CEBPE4; ISSN: 1055-9965
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: Acrylamide is a probable human carcinogen, which is present in several heat-treated foods. In epidemiol. studies, pos. assocns. with endometrial, ovarian, and renal cell cancer risk have been observed The incidence of central nervous system tumors was increased upon acrylamide administration in drinking water to rats. In the current study, the association between dietary acrylamide intake and human brain cancer risk was investigated for the first time. Methods: In 1986, 120,852 persons (ages 55-69 years) were included in the Netherlands Cohort Study on diet and cancer. At baseline, a random subcohort of 5,000 participants was randomly selected from the total cohort for a case-cohort approach. Acrylamide intake was assessed with a food frequency questionnaire at baseline and based on acrylamide analyses in relevant Dutch foods. Hazard ratios (HR) were calculated using Cox proportional hazards anal. Subgroup analyses were done for microscopically verified brain cancer, astrocytic gliomas, high-grade astrocytic gliomas, and never-smokers. The acrylamide risk ests. were adjusted for possible brain cancer risk factors. Results: After 16.3 years of follow-up, 216 brain cancer cases were available for anal. The multivariable-adjusted HR per 10 mg/d increment of acrylamide intake was 1.02 (95% confidence interval, 0.89-1.16). HRs were not significantly increased either when dietary acrylamide intake was analyzed as a categorical variable. Also, there was no association in the subgroups based on histol. and smoking. Conclusion: In this prospective cohort study, acrylamide intake was not associated with brain cancer risk. (Cancer Epidemiol Biomarkers Prev 2009;18(5):1663-6).

=> s l1 and l2 and l4
L7 2 L1 AND L2 AND L4

=> d l7 1-2 ibib abs

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:329799 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 146:312249
TITLE: Method for preparation of paraffin-embedded samples for microscopy by supercritical fluid

extraction
INVENTOR(S): Perrut, Michel; Imbs, Fredeeric; Deschamps, Frantz
PATENT ASSIGNEE(S): Histolex, Fr.
SOURCE: Fr. Demande, 29pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2891052	A1	20070323	FR 2005-9635	20050921
FR 2891052	B1	20071221		
WO 2007034071	A2	20070329	WO 2006-FR2149	20060920
WO 2007034071	A3	20070524		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP 1949068	A2	20080730	EP 2006-808171	20060920

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

IN 2008DN04259	A	20080815	IN 2008-DN4259	20080519
CN 101351692	A	20090121	CN 2006-80043398	20080521

PRIORITY APPLN. INFO.: FR 2005-9635 A 20050921
WO 2006-FR2149 W 20060920

AB The invention concerns a method for the preparation of histol. samples that are embedded in paraffin by: (a) exposing the sample to a first fluid, preferably supercrit. carbon dioxide for extracting the paraffin matrix; (b) impregnation of the sample with a mixture of compressed carbon dioxide, a water-soluble organic solvent and water; (c) gradual and controlled removal of the second compressed fluid; (d) recovery of the sample. Recovered samples can be stained; the staining of seminal vesicles with Masson's trichrome dye is presented.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:287904 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 143:292310
TITLE: In vitro and in vivo behavior of coral treated by hydrogen peroxide, supercritical ethanol, or heat
AUTHOR(S): Souillac, V.; Fricain, J. C.; Lepetitcorps, Y.; Bureau, V.; Chauveaux, D.
CORPORATE SOURCE: INSERM U577, Universite Bordeaux 2, Bordeaux, FR-33076, Fr.

SOURCE: Key Engineering Materials (2005), 284-286, 377-380
CODEN: KEMAEY; ISSN: 1013-9826
PUBLISHER: Trans Tech Publications Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this study we focus on the use of coral Porites Lutea and the various treatments used to remove proteins while assessing the impact of the various removal methods on the in vitro and in vivo coral behavior. No significant differences were observed in vitro among all materials. In vivo, no histol. differences were observed between Biocoral and samples treated by either hydrogen peroxide or a thermal procedure. The implants made from supercrit. fluid treated coral were more resistant to resorption (50% more resistant after one month).
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> e us 2006-562489/ap
E1 1 US2006-562481/AP
E2 1 US2006-562486/AP
E3 1 --> US2006-562489/AP
E4 1 US2006-562491/AP
E5 2 US2006-562494/AP
E6 1 US2006-562497/AP
E7 1 US2006-562500/AP
E8 1 US2006-562503/AP
E9 3 US2006-562506/AP
E10 1 US2006-562507/AP
E11 1 US2006-562511/AP
E12 1 US2006-562512/AP

=> s e3
L8 1 US2006-562489/AP

=> d all

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:14675 CAPLUS <<LOGINID::20090508>>
DN 142:89365
ED Entered STN: 07 Jan 2005
TI Method for histoprocessing
IN Bleuel, Erik Peter; Hofland, Gerard Willem
PA Academisch Ziekenhuis Groningen, Neth.
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N001-30
ICS G01N001-31; G01N001-36; B01J003-00
CC 9-4 (Biochemical Methods)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005001437	A1	20050106	WO 2004-NL462	20040630

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG
AU 2004252386 A1 20050106 AU 2004-252386 20040630
CA 2530750 A1 20050106 CA 2004-2530750 20040630
EP 1644715 A1 20060412 EP 2004-748692 20040630
EP 1644715 B1 20070103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
CN 1816737 A 20060809 CN 2004-80018826 20040630
AT 350657 T 20070115 AT 2004-748692 20040630
JP 2007521488 T 20070802 JP 2006-518560 20040630
ES 2279405 T3 20070816 ES 2004-748692 20040630
NZ 544311 A 20081224 NZ 2004-544311 20040630
IN 2006CN00364 A 20070706 IN 2006-CN364 20060130
US 20060228810 A1 20061012 US 2006-562489 20060405 <--
PRAI EP 2003-77047 A 20030630
WO 2004-NL462 W 20040630
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
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WO 2005001437 ICM G01N001-30
ICS G01N001-31; G01N001-36; B01J003-00
IPCI G01N0001-30 [ICM,7]; G01N0001-31 [ICS,7]; G01N0001-36
[ICS,7]; B01J0003-00 [ICS,7]
IPCR B01J0003-00 [I,C*]; B01J0003-00 [I,A]; B01L0007-00
[N,C*]; B01L0007-00 [N,A]; G01N0001-30 [I,C*];
G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36
[I,C*]; G01N0001-36 [I,A]
ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L
AU 2004252386 IPCI B01J0003-00 [I,C]; G01N0001-30 [I,C]; G01N0001-36
[I,C]; G01N0001-30 [I,A]; B01J0003-00 [I,A];
G01N0001-31 [I,A]; G01N0001-36 [I,A]
IPCR G01N0001-30 [I,A]; B01J0003-00 [I,C]; B01J0003-00
[I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A];
G01N0001-30 [I,C]; G01N0001-31 [I,A]; G01N0001-36
[I,C]; G01N0001-36 [I,A]
ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L
CA 2530750 IPCI B01J0003-00 [I,A]; G01N0001-30 [I,A]; G01N0001-31
[I,A]; G01N0001-36 [I,A]
IPCR G01N0001-30 [I,A]; B01J0003-00 [I,C]; B01J0003-00
[I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A];
G01N0001-30 [I,C]; G01N0001-31 [I,A]; G01N0001-36
[I,C]; G01N0001-36 [I,A]
ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L
EP 1644715 IPCI G01N0001-30 [I,C]; B01J0003-00 [I,C]; G01N0001-36
[I,C]; G01N0001-30 [I,A]; B01J0003-00 [I,A];
G01N0001-31 [I,A]; G01N0001-36 [I,A]
IPCR G01N0001-30 [I,C]; G01N0001-30 [I,A]; B01J0003-00
[I,C]; B01J0003-00 [I,A]; B01L0007-00 [N,C*];

B01L0007-00 [N,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C]; G01N0001-36 [I,A]

CN 1816737 IPCI G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,A]; B01J0003-00 [I,A]

IPCR G01N0001-30 [I,C]; G01N0001-30 [I,A]; B01J0003-00 [I,C]; B01J0003-00 [I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C]; G01N0001-36 [I,A]

ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L

AT 350657 IPCI G01N0001-30 [ICS,7]; B01J0003-00 [ICS,7]; G01N0001-31 [ICS,7]; G01N0001-36 [ICS,7]

IPCR B01J0003-00 [I,C*]; B01L0007-00 [N,C*]; G01N0001-30 [I,C*]; G01N0001-36 [I,C*]; B01J0003-00 [I,A]; B01L0007-00 [N,A]; G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,A]

ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L

JP 2007521488 IPCI G01N0001-28 [I,A]

IPCR G01N0001-28 [I,C]; G01N0001-28 [I,A]; B01J0003-00 [I,C*]; B01J0003-00 [I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A]; G01N0001-30 [I,C*]; G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C*]; G01N0001-36 [I,A]

FTERM 2G052/AA33; 2G052/AD34; 2G052/DA25; 2G052/EB12; 2G052/EC03; 2G052/FA02; 2G052/FD18; 2G052/GA31; 2G052/HC22; 2G052/HC25

ES 2279405 IPCI G01N0001-30 [I,C]; G01N0001-30 [I,A]; B01J0003-00 [I,C]; B01J0003-00 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C]; G01N0001-36 [I,A]

IPCR G01N0001-30 [I,C]; G01N0001-30 [I,A]; B01J0003-00 [I,C]; B01J0003-00 [I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C]; G01N0001-36 [I,A]

ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L

NZ 544311 IPCI G01N0001-30 [ICS,7]; G01N0001-31 [ICS,7]; G01N0001-36 [ICS,7]; B01J0003-00 [ICS,7]

IPCR B01J0003-00 [I,C*]; B01J0003-00 [I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A]; G01N0001-30 [I,C*]; G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C*]; G01N0001-36 [I,A]

ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L

IN 2006CN00364 IPCI G01N0001-30 [ICM,7]

US 20060228810 IPCI G01N0001-10 [I,A]

IPCR G01N0001-10 [I,C]; G01N0001-10 [I,A]; B01J0003-00 [I,C*]; B01J0003-00 [I,A]; B01L0007-00 [N,C*]; B01L0007-00 [N,A]; G01N0001-30 [I,C*]; G01N0001-30 [I,A]; G01N0001-31 [I,A]; G01N0001-36 [I,C*]; G01N0001-36 [I,A]

NCL 436/174.000

ECLA B01J003/00S; G01N001/30; G01N001/31; G01N001/36; L01L

AB The invention relates to the processing of a biol. sample for histol. anal. In particular, it relates to a rapid automated processing system that can be operated with continuous throughput and that eliminates the use of toxic solvents such as xylene. Provided is a method for processing a biol. sample for histol. anal., comprising contacting the sample with a composition comprising a supercrit. or near supercrit. fluid followed by impregnating the sample under a pressure of more than 1 bar with an

embedding medium, preferably paraffin. Also provided is a processor for preparing at least one sample for histol. anal., comprising at least one process reactor for the at least one sample, characterized in that the processor comprises supplying meansfor supplying to the reactor at least one substance of which at least one is in supercrit. phase or near supercrit. phase and at least one supplying means for adding the embedding medium to the reactor through conduit.

ST histoprocessing

IT Analysis
Process automation
(automated anal.; method for histoprocessing)

IT Histochemistry
Preservation
Supercritical fluids
(method for histoprocessing)

IT 124-38-9, Carbon dioxide, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method for histoprocessing)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Frayssinet, P; BIOMATERIALS 1998, V19(24), P2247 CAPLUS

(2) Hanstke, S; WO 0029037 A 2000 CAPLUS

(3) Howanec, M; US 20030072677 A1 2003

(4) Mandel, F; US 5993747 A 1999

(5) Milestone S R L; EP 0822403 A 1998

(6) S C Fluids Inc; WO 0178911 A 2001

(7) Tousimis, A; US 6493964 B1 2002

(8) Univ Miami; WO 0144783 A 2001 CAPLUS

=> s l1 and l2
L9 17 L1 AND L2

=> s l9 and py<=2004
25140142 PY<=2004
L10 4 L9 AND PY<=2004

=> d l9 1-17 ibib abs

L9 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:512345 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 149:222302
TITLE: Acute oral safety study of rosemary extracts in rats
AUTHOR(S): Anadon, Arturo; Martinez-Larranaga, Maria R.; Martinez, Maria A.; Ares, Irma; Garcia-Risco, Monica R.; Senorans, Francisco J.; Reglero, Guillermo
CORPORATE SOURCE: Department of Toxicology and Pharmacology, Faculty of Veterinary Medicine, Universidad Complutense de Madrid, Madrid, E-28040, Spain
SOURCE: Journal of Food Protection (2008), 71(4), 790-795
CODEN: JFPRDR; ISSN: 0362-028X
PUBLISHER: International Association for Food Protection
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Increasing interest in rosemary plants is due to their antioxidant and

health-enhancing properties. The aim of this study was to evaluate the potential acute toxicity of two supercrit. fluid exts. of rosemary. An acute safety study of rosemary exts. was conducted in Wistar rats at a single oral gavage dosage of 2,000 mg/kg of body weight Rosemary exts. were well tolerated; no adverse effects or mortality were observed during the 2-wk observation period. No abnormal signs, behavioral changes, body weight changes, or change in food and water consumption occurred. Two weeks after a single oral rosemary extract dose of 2,000 mg/kg of body weight, there were no changes in hematol. and serum chemical values, organ wts., or gross or histol. characteristics. Rosemary exts. appear to have low acute toxicity, and the oral LDs (LD50) for male and female rats are greater than 2,000 mg/kg of body weight

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:483982 CAPLUS <<LOGINID::20090508>>

DOCUMENT NUMBER: 148:523291

TITLE: Efficacy of pulmonary insulin delivery in diabetic rats: Use of a model-based approach in the evaluation of insulin powder formulations

AUTHOR(S): Amidi, Maryam; Krudys, Kevin M.; Snel, Cor J.; Crommelin, Daan J. A.; Della Pasqua, Oscar E.; Hennink, Wim E.; Jiskoot, Wim

CORPORATE SOURCE: Department of Pharmaceutics, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, Utrecht, 3508 TB, Neth.

SOURCE: Journal of Controlled Release (2008), 127(3), 257-266 CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The potential of N-trimethyl chitosan (TMC) with 2 degrees of quaternization (DQ), TMC20 (DQ 20%, as a mucoadhesive) and TMC60 (DQ 60%, as a mucoadhesive and a permeation enhancer), and dextran (as a non-mucoadhesive and non-permeation enhancer) microparticles as carriers for pulmonary delivery of insulin was studied in diabetic rats. The impact of the powder formulation on insulin bioavailability and its pharmacol. effect was evaluated using a population pharmacokinetic-pharmacodynamic (PKPD) model. Insulin-loaded microparticles were prepared by a supercrit. fluid (SCF) drying technique. They had a median volume diameter and median volume aerodynamic diameter of about 6-10 mm and 4 mm, resp. The PK of insulin in the diabetic rats was analyzed by a one-compartment disposition model and the PD was described by the minimal model of glucose disappearance. The bioavailability of the pulmonarily administered dextran-, TMC20- and TMC60-insulin microparticles relative to s.c. administered insulin, was 0.48, 0.59 and 0.95, resp. Histol. examns. of the rats' lungs did not show any local adverse reactions after single administration of insulin powders. The pharmacodynamic model could describe the insulin-glucose relationship and pharmacodynamic efficiency of insulin formulations, which was about 0.6*10-5 ml/mU, irresp. of the formulations. The current findings suggest that TMC microparticles are a promising vehicle for pulmonary delivery of insulin.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:261532 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 148:387078
TITLE: The effect of mesenchymal populations and vascular endothelial growth factor delivered from biodegradable polymer scaffolds on bone formation
AUTHOR(S): Kanczler, Janos M.; Ginty, Patrick J.; Barry, John J. A.; Clarke, Nicholas M. P.; Howdle, Steve M.; Shakesheff, Kevin M.; Oreffo, Richard O. C.
CORPORATE SOURCE: Bone and Joint Research Group, Centre for Human Development, Stem Cells and Regeneration, Developmental Origins of Health and Disease, Institute of Developmental Sciences, University of Southampton, Southampton, SO16 6YD, UK
SOURCE: Biomaterials (2008), 29(12), 1892-1900
CODEN: BIMADU; ISSN: 0142-9612
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The capacity to deliver, temporally, bioactive growth factors in combination with appropriate progenitor and stem cells to sites of tissue regeneration promoting angiogenesis and osteogenesis offers therapeutic opportunities in regenerative medicine. The authors have examined the bone regenerative potential of encapsulated vascular endothelial growth factor (VEGF165) biodegradable poly(lactic acid) (PLA) scaffolds created using supercrit. CO2 fluid technol. to encapsulate and release solvent-sensitive and thermolabile growth factors in combination with human bone marrow stromal cells (HBMSC) implanted in a mouse femur segmental defect (5 mm) for 4 wk. HBMSC seeded on VEGF encapsulated PLA scaffolds showed significant bone regeneration in the femur segmental defect compared to the scaffold alone and scaffold seeded with HBMSC as analyzed by indexes of increased bone volume (BV mm3), trabecular number (Tb.N/mm) and reduced trabecular separation (Tb.Sp. mm) in the defect region using micro-computed tomog. Histol. examination confirmed significant new bone matrix in the HBMSC seeded VEGF encapsulated scaffold group as evidenced by Sirius red/alcian blue and Goldner's trichrome staining and type I collagen immunocytochem. expression in comparison to the other groups. These studies demonstrate the ability to deliver, temporally, a combination of VEGF released from scaffolds with seeded HBMSC to sites of bone defects, results in enhanced regeneration of a bone defect.
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:261286 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 148:592807
TITLE: Poly(d,l-lactide)/nano-hydroxyapatite composite scaffolds for bone tissue engineering and biocompatibility evaluation
AUTHOR(S): Ren, Jie; Zhao, Peng; Ren, Tianbin; Gu, Shuying; Pan, Kefeng
CORPORATE SOURCE: Institute of Nano and Bio-Polymeric Materials, School of Material Science and Engineering, Tongji University, Shanghai, 200092, Peop. Rep. China

SOURCE: Journal of Materials Science: Materials in Medicine (2008), 19(3), 1075-1082
CODEN: JSMMEL; ISSN: 0957-4530
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Biodegradable polymer/bioceramic composite scaffolds can overcome the limitations of conventional ceramic bone substitutes such as brittleness and difficulty in shaping. However, conventional methods for fabricating polymer/bioceramic composite scaffolds often use organic solvents (e.g., the solvent casting and particulate leaching (SC/PL) method), which might be harmful to cells or tissues. In this study, poly(d,l-lactide)/nano-hydroxyapatite (PDLLA/NHA) composites were prepared by in-situ polymerization, and highly porous scaffolds were fabricated using a novel method, supercrit. CO2/salt-leaching method (SC CO2/SL). The materials and scaffolds were investigated by scanning electronic microscopy (SEM), transmission electronic microscopy (TEM) and gel permeation chromatog. (GPC). GPC showed that the mol. weight of composites decreased with increase of NHA content. However, the water absorption and compressive strength increased dramatically. The SEM micrographs showed that the scaffolds with pore size about 250 mm were obtained by controlling parameters of SC CO2/SL. The biocompatibility of PDLLA/NHA porous scaffolds were evaluated in vitro and in vivo. The evaluation on the cytotoxicity were carried out by cell relative growth rate (RGR) method and cell direct contact method. The cytotoxicity of these scaffolds was in grade I according to ISO 10993-1. There was no toxicosis and death cases observed in acute systemic toxicity test. And histol . observation of the tissue response (1 and 9 wk after the implantation) showed that there are still some slight inflammation responses.
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:207587 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 149:231289
TITLE: Human fetal bone cells associated with ceramic reinforced PLA scaffolds for tissue engineering
AUTHOR(S): Montjovent, Marc-Olivier; Mark, Silke; Mathieu, Laurence; Scaletta, Corinne; Scherberich, Arnaud; Delabarde, Claire; Zambelli, Pierre-Yves; Bourban, Pierre-Etienne; Applegate, Lee Ann; Pioletti, Dominique P.
CORPORATE SOURCE: Laboratory of Biomechanical Orthopedics EPFL-HOSR, Institute of Translational Biomechanics, Lausanne, CH-1015, Switz.
SOURCE: Bone (San Diego, CA, United States) (2008), 42(3), 554-564
CODEN: BONEDL; ISSN: 8756-3282
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fetal bone cells were shown to have an interesting potential for therapeutic use in bone tissue engineering due to their rapid growth rate and their ability to differentiate into mature osteoblasts in vitro. We describe hereafter their capability to promote bone repair in vivo when combined with porous scaffolds based on poly(-lactic acid) (PLA) obtained

by supercrit. gas foaming and reinforced with 5 weight% b-tricalcium phosphate (TCP). Bone regeneration was assessed by radiog. and histol. after implantation of PLA/TCP scaffolds alone, seeded with primary fetal bone cells, or coated with demineralized bone matrix. Craniotomy critical size defects and drill defects in the femoral condyle in rats were employed. In the cranial defects, polymer degradation and cortical bone regeneration were studied up to 12 mo postoperatively. Complete bone ingrowth was observed after implantation of PLA/TCP constructs seeded with human fetal bone cells. Further tests were conducted in the trabecular neighborhood of femoral condyles, where scaffolds seeded with fetal bone cells also promoted bone repair. We present here a promising approach for bone tissue engineering using human primary fetal bone cells in combination with porous PLA/TCP structures. Fetal bone cells could be selected regarding osteogenic and immune-related properties, along with their rapid growth, ease of cell banking and associated safety.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:12773 CAPLUS <<LOGINID::20090508>>

DOCUMENT NUMBER: 148:409888

TITLE: The CO2-SFE crude lipid extract and the free fatty acid extract from Perna canaliculus have anti-inflammatory effects on adjuvant-induced arthritis in rats

AUTHOR(S): Singh, M.; Hodges, L. D.; Wright, P. F. A.; Cheah, D. M. Y.; Wynne, P. M.; Kalafatis, N.; Macrides, T. A.

CORPORATE SOURCE: Natural Products Research Group, School of Medical Sciences, RMIT University, Bundoora, Victoria, 3083, Australia

SOURCE: Comparative Biochemistry and Physiology, Part B: Biochemistry & Molecular Biology (2008), 149B(2), 251-258
CODEN: CBPBB8; ISSN: 1096-4959

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The anti-inflammatory (AI) activity of a supercrit. fluid extract (CO2-SFE) of tartaric acid-stabilized Perna canaliculus mussel powder, and of the free fatty acid (FFA) class separated from the CO2-SFE extract by column chromatog., was investigated in the rat adjuvant arthritis model. Administration of the CO2-SFE extract (100 mg/kg BW/day s.c.) for 15 days post-adjuvant inoculation significantly reduced rear paw swelling by 34% and the deterioration in total body condition by 52% in arthritic rats, compared to vehicle controls. These observations were accompanied by a decreased blood serum ceruloplasmin oxidase activity, and reduced inflammatory response of the spleen. The mussel FFA extract given at one 3rd of the dose (30 mg/kg BW/day s.c.) and for a shorter treatment period (5 days during the inflammatory phase) achieved an even greater AI activity, and was equipotent to piroxicam (2 mg/kg BW/day s.c.). Preliminary toxicol. assessment using both arthritic and non-arthritic (healthy) rats revealed no significant differences between the mussel treatment groups and resp. vehicle controls in either organ wts., tissue histol., or selected biochem. parameters. These results indicate the CO2-SFE crude lipid extract and its FFA components from stabilized P. canaliculus mussel

powder contain biol. significant AI activity in vivo, with no apparent adverse side effects.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1036037 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 147:330086
TITLE: Repair of critical size defects in the rat cranium using ceramic-reinforced PLA scaffolds obtained by supercritical gas foaming
AUTHOR(S): Montjovent, Marc-Olivier; Mathieu, Laurence; Schmoekel, Hugo; Mark, Silke; Bourban, Pierre-Etienne; Zambelli, Pierre-Yves; Laurent-Applegate, Lee Ann; Pioletti, Dominique P.
CORPORATE SOURCE: Laboratoire de Biomecanique en Orthopedie EPFL-HOSR, Ecole Polytechnique Federale de Lausanne, Lausanne, CH-1015, Switz.
SOURCE: Journal of Biomedical Materials Research, Part A (2007), 83A(1), 41-51
CODEN: JBMRCH; ISSN: 1549-3296
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bioresorbable scaffolds made of poly(L-lactic acid) (PLA) obtained by supercrit. gas foaming were recently described as suitable for tissue engineering, portraying biocompatibility with primary osteoblasts in vitro and interesting mech. properties when reinforced with ceramics. The behavior of such constructs remained to be evaluated in vivo and therefore the present study was undertaken to compare different PLA/ceramic composite scaffolds obtained by supercrit. gas foaming in a critical size defect craniotomy model in Sprague-Dawley rats. The host-tissue reaction to the implants was evaluated semiquant. and similar tendencies were noted for all graft substitutes: initially highly reactive but decreasing with time implanted. Complete bone-bridging was observed 18 wk after implantation with PLA/ 5 weight % b-TCP (PLA/TCP) and PLA/5 weight % HA (PLA/HA) scaffolds as assessed by histol. and radiog. We show here for the first time that this solvent-free technique provides a promising approach in tissue engineering demonstrating both the biocompatibility and osteocond. of the processed structures in vivo.
REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:900303 CAPLUS <<LOGINID::20090508>>
TITLE: Comparison of properties of various chrome tanned leathers under medium of carbon dioxide supercritical fluid (II)
AUTHOR(S): Feng, Yuchuan; Chen, Min; Liao, Longli; Zhang, Weijuan; Cheng, Haiming; Li, Zhiqiang
CORPORATE SOURCE: College of Chemistry and Environment Protection Engineering, Southwest University for Nationalities, Chengdu, 610041, Peop. Rep. China
SOURCE: Zhongguo Pige (2006), 35(5), 36-38
CODEN: ZHPIEL; ISSN: 1001-6813
PUBLISHER: Zhongguo Pige Zazhishe

DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The histol. structure and phys. mech. properties of chrome-tanned leather within SCF-CO2 medium were compared with the leather tanned within water medium. The results showed that the fiber clearance of chrome-tanned leather within SCF-CO2 was larger than that of leather tanned within water, either with pickling or without pickling process. The thickness and the area of the leather increased 7.16% and 2.15% resp. to the normal chrome tanned leather, and also phys. mech. properties such as tensile strength and tear resistance either reached or exceed that of the normal chrome tanned leather.

L9 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:480763 CAPLUS <<LOGINID::20090508>>
TITLE: Effects of differential extraction of Verbena officinalis on rat models of inflammation, cicatrization and gastric damage
AUTHOR(S): Speroni, E.; Cervellati, R.; Costa, S.; Guerra, M. C.; Utan, A.; Govoni, P.; Berger, A.; Muller, A.; Stuppner, H.
CORPORATE SOURCE: Dipartimento di Farmacologia, Universita di Bologna, Bologna, Italy
SOURCE: Planta Medica (2007), 73(3), 227-235
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Verbena officinalis L. is used in folk medicine for the treatment of inflammatory disorders, skin burns, abrasions, and gastric diseases. Exts. obtained with different solvents (methanol, VoME; enriched flavonoids, VoEF; supercrit. CO2, VoCO2) were evaluated for anti-inflammatory, gastroprotective and cicatrizing activities. Addnl., the antioxidant capacity was determined in vitro. In order to confirm the activities investigated, histol. observations were performed. All exts. induce a remarkable anti-inflammatory activity. The gastric damage is significantly reduced by all exts. administered, whereby the most pronounced protection is observed for the VoCO2 and VoEF exts. Finally, a wound healing effect is obtained particularly by the CO2 extract, suggesting the presence of some lipophilic active principles. Histol. evidence confirms the results evaluated with the animal procedures. The results obtained after oral administration of V. officinalis exts. are also in agreement with the antioxidant capacity evaluated in vitro, confirming the relationship between pharmacol. activities and antiradical efficacy.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:329799 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 146:312249
TITLE: Method for preparation of paraffin-embedded samples for microscopy by supercritical fluid extraction
INVENTOR(S): Perrut, Michel; Imbs, Fredeeric; Deschamps, Frantz
PATENT ASSIGNEE(S): Histolex, Fr.
SOURCE: Fr. Demande, 29pp.

CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2891052	A1	20070323	FR 2005-9635	20050921
FR 2891052	B1	20071221		
WO 2007034071	A2	20070329	WO 2006-FR2149	20060920
WO 2007034071	A3	20070524		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP 1949068	A2	20080730	EP 2006-808171	20060920

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

IN 2008DN04259	A	20080815	IN 2008-DN4259	20080519
CN 101351692	A	20090121	CN 2006-80043398	20080521

PRIORITY APPLN. INFO.: FR 2005-9635 A 20050921
WO 2006-FR2149 W 20060920

AB The invention concerns a method for the preparation of histol. samples that are embedded in paraffin by: (a) exposing the sample to a first fluid, preferably supercrit. carbon dioxide for extracting the paraffin matrix; (b) impregnation of the sample with a mixture of compressed carbon dioxide, a water-soluble organic solvent and water; (c) gradual and controlled removal of the second compressed fluid; (d) recovery of the sample. Recovered samples can be stained; the staining of seminal vesicles with Masson's trichrome dye is presented.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:579081 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 144:177215
TITLE: Effect of Transforming Growth Factor b2 on Marrow-Infused Foam Poly(Propylene Fumarate) Tissue-Engineered Constructs for the Repair of Critical-Size Cranial Defects in Rabbits
AUTHOR(S): Dean, David; Wolfe, Michael S.; Ahmad, Yusra; Totonchi, Ali; Chen, Jeffrey E.-K.; Fisher, John P.; Cooke, Malcolm N.; Rimnac, Clare M.; Lennon, Donald P.; Caplan, Arnold I.; Topham, Neal S.; Mikos, Antonios G.
CORPORATE SOURCE: Department of Neurological Surgery and Research Institute, Case Western Reserve University, University

Hospitals of Cleveland, Cleveland, OH, USA
SOURCE: Tissue Engineering (2005), 11(5/6), 923-939
CODEN: TIENFP; ISSN: 1076-3279
PUBLISHER: Mary Ann Liebert, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This study investigates the osseointegration of poly(propylene fumarate) (PPF) with b-tricalcium phosphate (b-TCP) scaffolds in a critical-size (diameter, 1.6 cm), cranial defect in 4-mo-old rabbits (n = 51), killed at 6 or 12 wk. Two mol. wts. of PPF were used to produce bilayer scaffolds with 0.5-mm solid external and 2.0-mm porous internal layers. The porous layer was infused with bone marrow aspirate, with half the animals receiving 0.8 mg of transforming growth factor b2 (TGF-b2). No foreign body or inflammatory response was observed externally or on histol. examination of explants. Statistical anal. of histol. areal and linear measures of new bone formation found significantly more bone at the later sacrifice time, followed by implants receiving TGF-b2, followed by low mol. weight PPF implants. Approx. 40% of the explants were tested for incorporation strength with a one-point "push-in" test. Because no permanent fixation was used, implant strength (28.37-129.03 N; range, 6.4 to 29.0 lb of resistance) was due entirely to new bone formation. The strongest bone was seen in implants receiving TGF-b2-infused marrow in animals killed at 12 wk. These results support the use of PPF as an osteogenic substrate and future research into preoperative fabrication of critical size and supercrit.-size cranial prosthetic implants.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:287904 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 143:292310
TITLE: In vitro and in vivo behavior of coral treated by hydrogen peroxide, supercritical ethanol, or heat
AUTHOR(S): Souillac, V.; Fricain, J. C.; Lepetitcorps, Y.; Bureau, V.; Chauveaux, D.
CORPORATE SOURCE: INSERM U577, Universite Bordeaux 2, Bordeaux, FR-33076, Fr.
SOURCE: Key Engineering Materials (2005), 284-286, 377-380
CODEN: KEMAEY; ISSN: 1013-9826
PUBLISHER: Trans Tech Publications Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this study we focus on the use of coral Porites Lutea and the various treatments used to remove proteins while assessing the impact of the various removal methods on the in vitro and in vivo coral behavior. No significant differences were observed in vitro among all materials. In vivo, no histol. differences were observed between Biocoral and samples treated by either hydrogen peroxide or a thermal procedure. The implants made from supercrit. fluid treated coral were more resistant to resorption (50% more resistant after one month).
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:14675 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 142:89365
TITLE: Method for histoprocessing
INVENTOR(S): Bleuel, Erik Peter; Hofland, Gerard Willem
PATENT ASSIGNEE(S): Academisch Ziekenhuis Groningen, Neth.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005001437	A1	20050106	WO 2004-NL462	20040630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004252386	A1	20050106	AU 2004-252386	20040630
CA 2530750	A1	20050106	CA 2004-2530750	20040630
EP 1644715	A1	20060412	EP 2004-748692	20040630
EP 1644715	B1	20070103		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1816737	A	20060809	CN 2004-80018826	20040630
AT 350657	T	20070115	AT 2004-748692	20040630
JP 2007521488	T	20070802	JP 2006-518560	20040630
ES 2279405	T3	20070816	ES 2004-748692	20040630
NZ 544311	A	20081224	NZ 2004-544311	20040630
IN 2006CN00364	A	20070706	IN 2006-CN364	20060130
US 20060228810	A1	20061012	US 2006-562489	20060405

PRIORITY APPLN. INFO.: EP 2003-77047 A 20030630
WO 2004-NL462 W 20040630

AB The invention relates to the processing of a biol. sample for histol. anal. In particular, it relates to a rapid automated processing system that can be operated with continuous throughput and that eliminates the use of toxic solvents such as xylene. Provided is a method for processing a biol. sample for histol. anal., comprising contacting the sample with a composition comprising a supercrit. or near supercrit. fluid followed by impregnating the sample under a pressure of more than 1 bar with an embedding medium, preferably paraffin. Also provided is a processor for preparing at least one sample for histol. anal., comprising at least one process reactor for the at least one sample, characterized in that the processor comprises supplying meansfor supplying to the reactor at least one substance of which at least one is in supercrit. phase or near supercrit. phase and at least one supplying means for adding the embedding medium to the reactor through conduit.

REFERENCE COUNT: 8 THERE ARE 8 CTED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:381351 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 139:399655
TITLE: Tissue response to the Ftoraks plastic coated by synthetic hydroxyapatite and modified by supercritical carbon dioxide
AUTHOR(S): Karakov, K. G.; Shekhter, A. B.; Volozhin, A. I.
CORPORATE SOURCE: Stavropol. Gos. Med. Akad., Russia
SOURCE: Rossiiskii Stomatologicheskii Zhurnal (2003), (1), 7-9
CODEN: RSZOC8
PUBLISHER: Izdatel'stvo "Meditsina"
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The Ftoraks acrylic plastic was polymerized on water bath, treated in the CO2 supercrit. medium (smCO2), and subsequently the synthetic hydroxyapatite (HAP) was laser-dusted on it, after which the plastic obtained was examined for biocompatibility in rats. Ftoraks plates were implanted under the skin and histol. and histochem. examns. were carried out on days 10, 20, and 40. The smCO2 treatment most effectively reduced the cytotoxic activity produced by the plastic on the tissue, ensuring a maximum possible extraction of toxic compds. from the plastic. The effect is addnl. enhanced by the excimer laser HAP application. An active tissue reaction and the maturity of the connective tissue of the capsule formation around the implants were the main distinguished features of the HAP and smCO2-treated plastic. A polymer, after smCO2 and HAP, becomes more biocompatible, inducing less pronounced inflammatory reaction when implanted into the tissue.

L9 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:818925 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 137:16597
TITLE: Legal and technical issues of formalin disposition in association with autopsy
AUTHOR(S): Nakajima, Makoto; Yoshida, Ken-ichi
CORPORATE SOURCE: Dep. Forensic Med., Grad. Sch. Med., Univ. Tokyo, 113-0033, Japan
SOURCE: Nippon Hoigaku Zasshi (2001), 55(2), 247-254
CODEN: NHOZAX; ISSN: 0047-1887
PUBLISHER: Nippon Hoi Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The Ministry of Public Welfare notified on the disposition of formalin, which was used in the histol. examination in association with forensic or pathol. autopsy. However, those who concerned on the issue had not known exactly how they dispose formalin. The news on the illegal disposition of formalin from our department drew attention to the legal disposition of formation. These situations led us to investigate the legal and tech. aspects of formalin disposition. The authors examined the legally described methods such as oxidation, incineration and activated sludge processes and other methods such as formose, super-critical water oxidation, and wet oxidation processes. From legal point of view, the authors must process poisonous formaldehyde into nonpoisonous products under the control of The Poisonous and Deleterious Substances Control Law. Addnl., the products are under

the control of The Sewage Water Law and Water Pollution Control Law, particularly in terms of Biol. Oxygen Demand (BOD). After careful investigation, the authors tentatively conclude that incineration method is the best at present, though the supercrit. oxidation and wet oxidation processes may be better in order to cope with the worldwide movement toward the control of environmental hormones and warm climate.

L9 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:23796 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 130:200880
TITLE: Histological integration of allogeneic cancelous bone tissue treated by supercritical CO2 implanted in sheep bones
AUTHOR(S): Frayssinet, Patrick; Rouquet, Nicole; Mathon, Didier; Autefage, Andre; Fages, Jacques
CORPORATE SOURCE: DePuy-Bioland, Toulouse, 31100, Fr.
SOURCE: Biomaterials (1998), 19(24), 2247-2253
CODEN: BIMADU; ISSN: 0142-9612
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Different chemical or phys. methods of bone processing have been developed to decrease the antigenicity of allogeneic bone which may delay or prevent graft integration. We have developed a method based on delipidation and deproteination of the bone with a supercrit. fluid and hydrogen peroxide. Cylinders of cancelous allogeneic bone treated in this way were implanted for four weeks, four months or eight months in holes drilled in sheep condyles or tibial plateau. Histol. sections were then processed and analyzed qual. and quant. using an image anal. software coupled to a light microscope Measurements were made of the trabecular bone surface (BS/TS), the relative osteoid surface (OS/BS), the active osteoid surface (OS/BS), active resorption surface (Oc.S/BS) and the relative surface of newly formed bone. After four weeks, the control of cylinders (non-treated allogeneic bone) had been invaded by cellular tissue composed of lymphocytes and plasmocytes surrounding remnants of the donor bone marrow tissue. The processed cylinders showed osteoid apposition at the surface of their external trabeculae. The trabecular bone and osteoid surfaces were significantly higher in the processed bone sections than in the control bone sections. After four months, most of the control material had been osteolyzed and replaced by connective tissue containing lymphocyte islets, while the processed materials showed a large amount of bone synthesized at the surface of implant trabeculae which appeared fragmented and disseminated within the newly formed bone. All the histomorphometric parameters measured were significantly different from those of the control. By eight months, most of the control material had been totally osteolyzed with very little bone ingrown in the implantation site.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:805306 CAPLUS <<LOGINID::20090508>>
DOCUMENT NUMBER: 123:208740
ORIGINAL REFERENCE NO.: 123:36983a,36986a
TITLE: Histological evaluation of xenogeneic bone treated by supercritical carbon dioxide

implanted into sheep

AUTHOR(S): Frayssinet, P.; Asimus, E.; Autefage, A.; Fages, J.
CORPORATE SOURCE: Bioland, Toulouse, 31100, Fr.

SOURCE: Journal of Materials Science: Materials in Medicine (1995), 6(8), 473-8
CODEN: JSMMEL; ISSN: 0957-4530
PUBLISHER: Chapman & Hall
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Untreated xenogeneic bone is known to be rejected when implanted into human or animal bone. It contains bone marrow tissue which is highly antigenic. To be used as an alternative to auto and allografts, this antigenic material must be entirely removed. Removal of this soft tissue contained in the bone structure was performed using a delipidation process with supercrit. CO2 followed by a deproteination with hydrogen peroxide or protease extraction Such materials were implanted into sheep bone for periods of 3 wk, 2 mo and 4 mo. Bone whose organic matrix was destroyed by sintering, and untreated xenogeneic bone were used as controls. Qual. histol. and histomorphometry, measuring the percentage of the material in contact with newly formed, bone were performed on implant sections. The osseointegration of the supercrit. CO2-treated bone samples was equivalent to that of bone made inorg. by sintering, while the untreated bone was embedded into an inflammatory tissue made up of macrophages, giant cells and plasmocytes.